FEDERAL COMMUNICATIONS COMMISSION

+ + + + +

PUBLIC SAFETY NATIONAL COORDINATING COMMITTEE

+ + + + +

FRIDAY, FEBRUARY 21, 2003

+ + + + +

The National Coordinating Committee met in the Commissioners Hearing Room at the Federal Communications Commission, 445 12th Street, S.W., Washington, D.C. at 9:30 a.m., Kathleen M. H. Wallman, Chair, presiding.

PRESENT:

MICHAEL WILHELM	Designated Federal
	Official
ERNEST HOFMEISTER	Steering Committee
WAYNE LELAND	Steering Committee
	Alternate
management a continuament	Q+

KATHLEEN M. H. WALLMAN Chair

TIMOTHY LOEWENSTEIN Steering Committee
HARLAN MCEWEN Steering Committee
RICK MURPHY Steering Committee
STEVEN PROCTOR Steering Committee

NEAL R. GROSS

2

A-G-E-N-D-A

Welcoming Remarks	3
Presentation by John Oblak	15
Presentation by Adam Rubinson	31
Presentation by Joe Ross	39
Presentation by Steve Fennell	42
Presentation by Dr. Fernando Daniels	49
Presentation by Lt. Dave Mulholland	58
Report from the Technology Subcommittee	86
Report from Implementation Subcommittee	90
Report from Interoperability Subcommittee	93

P-R-O-C-E-E-D-I-N-G-S

2 |

9:38 a.m.

CHAIR WALLMAN: Good morning and welcome to the 18th meeting of the National Coordination

Committee.

When I read, on the website, that this is our 18th meeting, I realized that I see you folks more often than I see my cousins. But then, again, I like some of you much more than some of my cousins. So maybe that is okay.

We are going to do a few things today.

We are going to pay some respects to some coming and going figures very important to the public safety committee. And we are going to hear some subcommittee reports, and we are going to hear a special presentation from the District of Columbia, on some ideas that they have, relevant to what we are doing.

Let me start just by introducing the new chief of the Wireless Telecommunications Bureau,

John Muleta. I've known John for a long time, we've worked together when I was at the Commission.

NEAL R. GROSS

John has a background in consulting, a background in walking the line for GTE. He has done just about everything in the Telecom industry. He worked in the Common Carrier Bureau after a stint in OPP.

He came to the Bureau to take over the

He came to the Bureau to take over the enforcement division, and he did a masterful job at managing a very difficult process problem that they had with a backlog of complaints.

John is a very persuasive guy. When he came to explain why he should get the job, he was the most prepared candidate. He brought a PowerPoint presentation to the interview, and he had a page that was called "Why I should get the job". And it had three things on it.

And he paused at the end of the page and said, of course there are many more reasons than these three, but in PowerPoint you can only have three points on a page.

So he was an instant and no-brainer selection for that job. John, most recently, was head of Source One, a Washington area systems

NEAL R. GROSS

integration firm.

He worked for PSI Net in multiple capacities, doing all kinds of strategic projects for the company. He has very rich academic qualifications for a job like this, and for working with the Public Safety community.

He has a BS in engineering, he has an MBA and a JD, all from the University of Virginia.

So I've known John for a very long time, professionally, personally, and I know that he will be a real asset to this committee.

And now I would like to acknowledge the outgoing Wireless Telecommunication Bureau Chief,

Tom Sugrue. Tom has established a record for stamina and tenacity. Apparently he is the longest serving Wireless Telecommunications Bureau Chief at four years, and he is in the process of leaving the Commission.

Tom's achievements as Bureau Chief have been impressive. He did what many people thought was impossible, he eliminated an enormous backlog, and established a new speed of service goal system

1 for the Bureau.

Tom has made his imprint on many of the Commission's newsworthy actions over the past four years, including those which originated from the NCC.

He has an impressive knowledge of the needs of public safety for reliable communications, and has been public safety's advocate when new spectrum became available.

The 700 Mhz public safety spectrum, the new 4.9 GHz spectrum, protection of public safety systems against interference, and improve interoperability, all are part of the legacy that Tom leaves.

He also leaves with the admiration and affection of the Wireless Telecommunications Bureau staff. He instilled, in that staff, what I certainly regard as a proper respect for a storied baseball team, and a legendary automobile.

Of course I'm talking about the Red Sox, and Chevy Corvettes. Tom, would you please stand up and accept our applause and recognition?

NEAL R. GROSS

(Applause.)

CHAIR WALLMAN: If the spirit moves you, would you say a few words?

MR. SUGRUE: Well, I don't get asked to speak as often as I used to, so I figure I hope you are ready for a long oration.

I just wanted to take this opportunity to thank the NCC. I have a special affinity for this group. It came into existence just as I was coming in the Wireless Bureau, about four years, and it was created in the Commission order in '98.

But it was formed, and the people were brought together in early '99. My first Commission meeting, as Bureau Chief, I had an item at that meeting, but it was to announce that Kathy Wallman agreed to be Chair of the NCC, and we called Kathy up to the Commission's table, right here, and all the Commissioners were saying all these wonderful things about her.

I was sitting there, next to her, and then sort of, Sugrue, we are glad you are here, too, whatever the heck you are going to be doing. But we

are really happy that Kathy has agreed to take this thing on.

And, of course, she has done just a wonderful job. I think we jointly had a good four years, a good run here. I think this group made a lot of noise, and made a lot of progress. So that if you can do both, and have some fun at the same time, I think it is really worthwhile.

We, in the Bureau, tried to have an open and constructive relationship with the public safety community. That doesn't mean we always agreed on everything. The -- I don't agree with all my friends, and I like them a lot. And I don't agree with my wife all the time, and I'm in love with her.

And I love you guys, but we -- but whenever we didn't agree we tried to find out what is the problem, what is the issue, what are the concerns of this community, tried to have you guys understand what are the concerns of the Commission.

And, guess what? At the end of the day it turned out those differences, I think, were minimal, the gaps were bridged, and workable

NEAL R. GROSS

solutions were found, I think, to every major issue. 1 2 I also want to -- this particular group, 3 the NCC, I think has an excellent record of accomplishment and achievement. The people serving 4 on this don't get paid for this. 5 The Commission has some advisory 6 7 committees that somehow there is a budget and their travel expenses are paid, and so forth. You are all 8 volunteers. It is sort of a thankless task. You 9 10 have to sacrifice time, you all have day jobs. And to come here, or to different spots 11 12 around the country and to work in the public 13 interest, and in this good cause, I think, is very 14 impressive. And I know I've been very impressed. 15 I think you have put in place an excellent framework going forward on 700 MHz for the 16 17 interoperability capability that is so important for public safety, for the efficient use of this 24 MGz 18 19 spectrum. All we need now is to get our hands on 20 21 the spectrum. But that is a problem that I will

leave for John going forward, and all. You are

1	going to move those broadcasters out of there?
2	Okay, no problem.
3	I didn't want to solve all the problems
4	before John got here, you know? So we will just
5	leave that one for him. So I do want to thank Kathy
6	Wallman who has been stalwart in her service as
7	Chair, and Michael Wilhelm, who served as the
8	designated federal officer. Distinguished federal
9	officer.
10	(Laughter.)
11	CHAIR WALLMAN: I thought it was
12	designated driver?
13	MR. SUGRUE: That is right, that is how
14	he got that grey hair, that means he is
15	distinguished.
16	And I would also like to thank, let's
17	see, Glen Nash, and John Powell, Ted Dempsey, the
18	subcommittee chairs. As I said, this is important
19	work and you people should feel proud of what you've
20	done.
21	I know you have a little work to finish
22	up, I'm not saying it is quite over yet. But

looking back on it, it is a good framework and a good basis to move forward.

So thank you, thank you on behalf of the Wireless Bureau, and thank you on behalf of the American people. And, personally, thank you on my own behalf. You have made my tenure here, as the Chief of the Wireless Bureau, a much more productive and enjoyable, and rewarding one.

So good luck, and whatever I do, which I don't know what the heck it will be, I hope our paths cross again, thank you.

CHAIR WALLMAN: Tom, if you would just stay for one minute to accept a small token from the NCC, I would like to present you with this crystal globe, which symbolizes three sentiments that we have for you, as you leave.

The first is that because of the work that you have done with public safety and with the NCC, we really believe that the world and our country are a safer place to leave, and we hope you will be justifiably proud about your personal contribution to that.

NEAL R. GROSS

1	Second, as you can see, it is a small
2	globe, so we are hoping that our paths will cross
3	again. We have enjoyed working with you, and we
4	hope we will again.
5	And then, third, wherever you go, and
6	whatever you do, the world is your oyster, and we
7	hope you find a lot of pearls, because no one is
8	more deserving than you.
9	MR. SUGRUE: Well, thank you, Kathy I
10	appreciate that.
11	(Applause.)
12	MR. SUGRUE: Nash used to throw these at
13	me when he was president of APCA, so I started to
14	duck when I saw Kathy walking to me. And take good
15	care of John, okay? This guy over here can be
16	trouble, so just watch out for him.
17	Thanks a lot.
18	(Applause.)
19	CHAIR WALLMAN: I also want to
20	acknowledge Kathleen Ham, who is going to be
21	continuing to work on public safety and spectrum
22	issues, generally, but she will be doing so as the

Deputy of the new Office of Strategic Planning and 1 2 Policy, OPP, which you may be familiar with, as 3 being reorganized in that fashion. And Kathleen is going to step in to 4 serve as Deputy. So we will have another person who 5 6 understands these issues on a higher floor in the 7 building, and we are very grateful that we will be able to continue to work with her. 8 9 (Applause.) 10 MR. WILHELM: Let me say a few things 11 that you are already tired of because I have said them, I think, at every meeting. 12 13 First of all the statute that we operate 14 under requires that we have a list of everybody 15 attending the meetings. There is a sign-in sheet to my left, at the table. Joey Alfred will help you 16 with that. 17 18 The second point is that these proceedings are being transcribed, and we can't pick 19 up speech directly from the audience, you have to 20 21 come to the microphone in the center of the floor.

NEAL R. GROSS

The third thing is that we had a

1	subcommittee meeting in the 7th floor conference
2	room, yesterday, and all the laptops tripped the
3	circuit breaker in the room. So if you could
4	operate on batteries, for the rest of this meeting,
5	we would appreciate it.
6	CHAIR WALLMAN: Okay, all right. So,
7	let's see. As you know we've all been waiting for a
8	final word from TIA on recommendations for 700 MHz
9	wide band data standard.
10	John Oblak will be giving us an update
11	on that work in today's program. In order to allow
12	the NCC the time to receive, and review, the TIA
13	recommendation, Chairman Powell, that is Michael
14	Powell, not John Powell, has extended the NCC's
15	charter for six months, until July 25th, 2003.
16	The schedule of our meetings between now
17	and then will depend upon the progress of TIA's
18	work, and rather than anticipate when that might be,
19	I've asked John Oblak to keep me informed of TIA's
20	progress.
21	We are in the process of trying to

settle on a date for the next meeting, which will

need to occur before July 25th, in order to stay 1 2 within our charter authority. And so we will have 3 some news on that, later, in this meeting. So is John Oblak here? There you are. 4 We are ready when you are. John, as you know, 5 6 brings decade of standard setting experience to his 7 position as Chairman of TIA TR-8, the engineering committee for private radio. 8 9 He brings a wealth of practical 10 experience to the standard setting process because in addition to chairing the TR-8 committee he has a 11 full time, plus, job serving as the chief engineer 12 of the E.F. Johnson company, one of the pioneer 13 14 companies in mobile radio communications. 15 MR. OBLAK: Thank you very much. I have a very brief presentaTion on the status of TIA's 16 17 wide band data, to date, and just to bring you up to 18 date on some of the things that we've accomplished, 19 and what our plans are. First of all, since our last meeting 20 21 we've had several documents published, and several

NEAL R. GROSS

moved forward. I will go through them very briefly.

The wide band data transceiver method of measurements document has been published as of February, just very recently. The wide band data performance recommendations, I have here, has been published. I haven't seen confirmation that it has, but if it hasn't, publication is imminent.

Wide band data mobility management layer document, the document has recently been moved to the ballot process, it is in ballot right now. We expect it to close, it will close before the next TIA meeting in April. And at that time we expect that it will be moved toward publication.

Likewise, the packet data specification document is in ballot already. And, again it is expected to close ballot before the April meeting, and we are expecting that in April it will be also authorized for publication.

We have one document that has lagged behind a little bit slower than we had even anticipated, and that is the text messageing service document. We were a little surprised by the amount of work that it took to get the mobility management

and packet data specification documents completed. 1 2 And so it has delayed this document. 3 However, drafting work has started on the document. We target to ballot in June, which would mean 4 5 publication in August. And I think I may have misspoke yesterday when I said that this was 6 7 probably doable by July. It is probably more likely August that we will be completed, finally completed 8 9 with this document. 10 I will close with just a summary slide There are nine 11 of where we are in the process. 12 documents, as you see on the right-hand side of the 13 slide, that define interoperability of wide band 14 data. To date six of those documents have been 15 published, or will be published within a matter of 16 17 weeks. Two documents, as I mentioned, the packet 18 data specification and the mobility management specification, are in the ballot process, and likely 19 to be published in the April time frame. 20 21 It is the text messaging specification

that we expect will lag on, it will be the last

document to come. And, again, we are expecting that 1 2 we should be done by this August, on this document. 3 There are two other documents that you Those are overview documents, we wouldn't 4 see. expect those to be referenced in any rulemaking, but 5 6 they are overview documents of the process, and that 7 is the systems and standards definition document, which has been published, and a wide band air 8 9 interface document, which is in the works right now. 10 I would be glad to answer any questions that anyone might have at the moment. 11 MR. NASH: Glen Nash, Chairman of the 12 Interoperability Subcommittee. 13 14 Just a question about your August statement, there, for that final document. When you 15 say publish, are you meaning to actually have the 16 17 ink put to the paper in August, which means that the 18 approval will occur in your meeting in June? What I anticipate there is 19 MR. OBLAK: that the approval for publication will be in our 20 21 August meeting, and with the TIA cycle of publication means we could be published by the end 22

1	of August. In other words, actual ink on paper.
2	MR. NASH: Okay, so the final TIA
3	approval, then, you are now looking in your August
4	meeting, which will be in Indianapolis the second
5	week of August?
6	MR. OBLAK: That is correct.
7	MR. NASH: So the Steering Committee,
8	that modifies our discussion this morning about
9	timing of another meeting.
10	MR. OBLAK: Again, I apologize if I may
11	have misstated it at yesterday's meeting, or left
12	the opinion that we might have a July publication.
13	If I did misstate, I apologize for my misstatement.
14	MR. MCEWEN: To ask a question to
15	clarify. Michael, your guidance, and Kathy's
16	guidance on how much, do we have to have it
17	published before we can finalize our work?
18	I mean, they will have pretty much
19	accomplished it, right, by the June meeting?
20	MR. OBLAK: I believe so, yes.
21	CHAIR WALLMAN: What is the likelihood
22	that there might be revisions past that date?

1	MR. OBLAK: I think that August is a
2	conservative date. I think we will be able to meet
3	that with no trouble. In other words, will it delay
4	beyond that? I don't expect.
5	MR. MCEWEN: See, here is the issue, is
6	that right now the NCC charter has been extended to
7	expire on July 25th. The problem is that in order
8	for us to act on this, we would have to do it before
9	that, or we would have to have another extension,
10	which is we are trying to avoid, I think.
11	CHAIR WALLMAN: Where is it likely to
12	be, in the process, in the middle of July? And is
13	it, it won't be published, but
14	MR. OBLAK: It won't be published, it
15	probably should be through the ballot phase.
16	CHAIR WALLMAN: And so is it what is
17	the likelihood that there would be substantive
18	changes to it, after it has gone through balloting?
19	MR. OBLAK: More than likely I would
20	expect that it would be editorial type changes, and
21	available for, with very little modification
22	required. But that is a supposition on my part at

this point.

CHAIR WALLMAN: Well, I'm trying to figure out whether we could sort of, you know, conditionally approve it, you know, assuming there are no major changes in it.

MR. OBLAK: I think it would be -- I think by the June meeting I would certainly have, by the June TIA meeting, excuse me, I would certainly have a good feel for where we are in the process.

And, presumably, with the 30 day ballot it would, say, before the end of the NCC charter in July, we would know the nature of the comments of the ballot, and could predict the outcome.

Certainly if there were few comments, if they were editorial in nature, and if the overwhelming vote was for approval of the document, I think we could go out on a limb and predict the approval of the document.

Again, typically the way these things are balloted people will either vote in favor of the document, in favor with comments, or opposed to the documents.

NEAL R. GROSS

And previous documents have been 1 2 overwhelmingly in favor of. In fact, I don't think 3 we've had any negative comments. We have had some approval with comments, and those were easily 4 5 handled. So certainly by the July time frame I 6 7 would have a very good feeling for the viability of the document, of the ballot. 8 CHAIR WALLMAN: Okay. Well, then that 9 probably counsels, we had a brief discussion about 10 possible meeting dates in the Steering Committee 11 caucus. So that probably counsels for going ahead 12 13 with the meeting in July. And we will sort of decide how far out 14 15 on a limb we would be going. We may want to talk with General Counsel's office, and so forth, just to 16 17 make sure we are on terra firma. 18 MR. NASH: We certainly would know what the document number is going to be, when it gets 19 published as a standard. The only thing we would 20 21 not have is the final published version of the

document that we could turn in that day.

1	So I suppose, you know, we could
2	approve, forward it subject to final approval by TIA
3	in August, or some statement like that, that could
4	allow us to yes, could allow us to move forward.
5	And you say, how far out on a limb do we
6	want to step, so
7	MR. WILHELM: Are the documents
8	proprietary or could, for example, the draft be
9	released to the NCC for evaluation?
10	MR. OBLAK: I am trying to think of
11	TIA's policy on that, and I would doubt that it
12	would be available.
13	MR. LELAND: Well, let me help on that.
14	I believe, I mean, we have, under certain
15	circumstances, taken documents that haven't been
16	completed and, with restrictions, made them
17	available to a group.
18	Now, I think that that would not be a
19	problem because I think in the process of going into
20	the FCC, and then for publication by the FCC, by
21	that time, we would also have the ballot completed

and be out for publication. So I think that is

1 workable.

CHAIR WALLMAN: Glen?

MR. NASH: I guess on that question I would ask for guidance from the Steering Committee, you know, as far as the work of the Technology Subcommittee, you know, would you be asking us to recommend adoption of a document that we may not have, you know, the members may not have had a chance to look at and read through?

And to the extent that, you know, recognizing that membership of the Committee is open to anybody and anybody that wants to participate, making that document available for review means opening it up to the world.

So I think we are sort of in a dilemma here.

CHAIR WALLMAN: Well, is there some way, within the TIA process, I guess what I understand is that it eventually becomes a public document. But while it is in gestation it is not, is that right?

MR. OBLAK: Well, I think, perhaps I

could answer. When a document goes for ballot,

NEAL R. GROSS

those ballots are open ballots. It certainly 1 2 doesn't constitute publication of the document, but 3 it is a wide distribution of the document, and would be available for comment. 4 5 As I said, and Wayne you spoke 6 correctly. We have, in the past, dealt with even 7 the FCC on issues with documents where we've had a review of draft documents by the FCC labs in recent 8 9 case in point. 10 And, certainly, it is not -- while it is not open for publication, I think it would be 11 available for review by this committee. 12 CHAIR WALLMAN: Well, if there might be 13 a way for you to help us work with TIA a way that 14 15 would give us the document for the specific purpose of reviewing it for the NCC, that would be helpful. 16 17 And I would be respectful of the TIA 18 process, but I also think we can't adopt a document, even conditionally, if we don't know what is in it. 19 So could I ask Glen, John, and Wayne, to try to 20

work together to figure out how we can get

appropriate dissemination of the document with

21

adequate protection?

MR. HOFFMEISTER: Ernie Hoffmeister, M/A COM. As a participant in the process I think it is pretty unlikely that there are going to be any real negative votes on that particular document.

I think all the interested parties are actually part of the process, and are working together toward that end. In terms of Glen's comment, in terms of reviewing the documents, I could point out that, I mean, there are nine documents, so there is a body of material of published documents that should the Technology Committee want to dig into that, in fact some of the members of the Technology Committee are already involved, there is a body of material that, certainly, seems like it could be made available, except for this last document.

MR. ROSS: Joe Ross, D.C. government.

Can you help me understand why we can't continue

this Committee in perpetuity? I mean, I think that

there is a lot of valuable work being done here, and

I think there are many more things to discuss moving

1	forward in the future, operations issues, technical
2	issues.
3	CHAIR WALLMAN: Sure, let me try to shed
4	some light on that. I agree with your premise. The
5	question is, what is the vehicle to continue that
6	discussion.
7	We are chartered as a federal advisory
8	committee, and I don't know that there are any such
9	committees that are chartered in perpetuity, they
10	are normally chartered for a stated period of time.
11	We have been extended twice.
12	And the Federal Advisory Committee is,
13	in essence, sort of an exception to the rulemaking
14	process, it allows input to the rulemaking process
15	under very special circumstances.
16	So, you know, it is something that GSA
17	and OMB keep track of, they don't like to
18	proliferate them. So we have responsibility to that
19	spirit of the Federal Advisory Committee Act.
20	And there are lots of other places where
21	interoperability issues are focused upon in terms of
22	operational coordination. We have a specific

purpose of recommending standards to the FCC. 1 2 within the things that the FCC asked us to do, and 3 we were chartered and empowered to do, we are almost done with the list, apart from this item here. 4 If we absolutely, positively had to be 5 6 rechartered to finish this item, we could do it. 7 But we have already been rechartered the second time for a limited period of time, in expectation that we 8 could finish the work of the Committee. 9 10 MR. ROSS: I guess all good things take So, you know, if it would help the District 11 time. 12 of Columbia would be happy to ask, those necessary, to continue the NCC. 13 14 Because I think that putting some, you 15 know, arbitrary deadline that is too aggressive, on these technology standards process, and not 16 17 following through with it, and having the NCC be 18 able to, you know, in its totality confirm a particular standard, I think that is a mistake. 19 And I think that we should extend the 20 21 NCC beyond it, and I really do think that we should

extend the NCC, you know, for an additional period

of time, to follow through with all the things that 1 2 the NCC isn't acting upon. 3 CHAIR WALLMAN: I understand the 4 thought, you know, but we were invented by the FCC to serve a particular purpose, and to perform 5 6 particular tasks, and we are near the end of that 7 And all good things take time, and all good things have to come to an end. 8 9 So it is a resource allocation issue, as 10 well, for the FCC, and for some of us, personally, 11 who do this on a volunteer basis. But if we need to be rechartered, we sought this extension for a 12 13 length of time that we thought would keep us apace 14 of the TIA process. And if we are a little short, then we 15 will do what we have to, to finish our work. 16 17 don't think that we would be authorized, by the 18 Commission, or by GSA, to extend beyond the number 19 of tasks that we were asked to perform. 20 MR. OBLAK: Thank you very much. 21 CHAIR WALLMAN: So coming away from 22 that, Glen, Wayne, and John will try to figure out

how to get the document circulated appropriately. 1 2 Thank you, John Oblak. We now have a 3 special presentation from officials from the government of Washington, D.C., which has, perhaps, 4 the most complex mix of public safety communications 5 requirements of any city in the world. 6 7 There are more police agencies here than I can count. Did you know that the U.S. Mint has 8 9 its own police force? How about that? Fire and EMS 10 agencies in Maryland and Virginia often help out in the District, and vice versa. 11 Federal and D.C. agencies work hand in 12 hand in everything from snow removal to the 13 14 management of large protests. One important spoke in this multi-spoked communications wheel is the 15 D.C. Office of the Chief Technology Officer, OCTO. 16 Joe Ross and Adam Rubinson of OCTO have 17 18 a place on our agenda, this morning, for a brief presentation on some of the unique public safety 19 communications needs of the District of Columbia. 20 21 So, Joe and Adam would you please

introduce yourselves? Why don't you all introduce

1	yourselves?
2	MR. ROSS: Joe Ross, District's wireless
3	programs.
4	CHAIR WALLMAN: And Adam is going to
5	make the presentation.
6	MR. RUBINSON: I am actually going to
7	kick it off. I'm Adam Rubinson, I'm the Deputy
8	Chief Technology Officer for the District of
9	Columbia, and I'm also a citizen of the District of
10	Columbia.
11	Joe is going to be touching on the, Joe
12	and some of the members of our public safety
13	community, that can make it here today, are going to
14	be talking about some of the really critical
15	applications and the technical requirements to
16	deliver those applications for our public safety
17	personnel.
18	But throughout this entire presentation
19	we could really boil it down into three major
20	points. Post-9-11, our public safety personnel in
21	the District of Columbia need the most timely,

comprehensive information available. That is the

first point, and they are going to be talking about some of the applications that are absolutely critical for providing that information.

The second point is that providing that information, these applications necessitates an affordable highly scaleable, and very high capacity wireless data network. And Joe will be talking about the specifications of that.

And, finally, the third point is that the proposed solution that the District of Columbia is going to be talking about today, we are resolute in our belief that this will meet our requirements.

And so we really ask that you very seriously take these into consideration, if you will. We really invite you to check our math, to take a look at our technical requirements, and feel comfortable that they do, in fact, meet our public safety requirements.

In addressing our business requirements, or our public safety requirements, we would ask that you, as opposed to checking our math, please don't reject our public safety requirements, they are not

developed by the techies, they are not developed by the engineers, they are not developed by the public safety communications experts.

Our public safety requirements are developed by the public safety community, and public safety leaders in the nation's capital. Some representatives from them will be talking to you today.

But I just wanted to make that point because when we talk about the fact that we need reliable, always available, video as opposed to choppy, grainy, and not always available, video, that is our public safety requirement.

And when we say that hot spot coverage is not going to meet our public safety requirements because it simply is not what we need to meet our requirements in times of meeting any particular terrorist threats in certain parts of the city, other law enforcement and public safety, Homeland Security issues, we ask that you take those seriously, and I'm sure you will.

Again, it is public safety leaders that

NEAL R. GROSS

are asking that you consider this. And, in that vein, let me read to you from the letter from Deputy Mayor Margaret Kellums. This is the D.C.'s Deputy Mayor for public safety and justice.

She writes: I'm most appreciative of the work of this Committee in bringing public safety communications issues front and center. All of your tireless, voluntary, efforts in the nation's service have not gone unnoticed.

It is at this juncture, however, that your decisions may have the greatest impact on the ability of major municipalities to protect the public. To safeguard the lives of the public and public safety personnel, we must have high speed wireless networks for accessing critical information.

In this era of code orange warnings, the capacity to deploy these applications is absolutely essential in meeting the public safety and homeland security needs of the nation's capital. We need these applications now.

Moreover, we dare not foreclose the

NEAL R. GROSS

1	opportunity to take advantage of new technologies
2	and applications that will be developed in the near
3	future.
4	Additionally, we are facing the greatest
5	challenges to our national security in an age of
6	extreme budget cutting. We need to implement
7	systems that maximize commercial innovations, and
8	market-based pricing.
9	That is why the high speed economical
10	and scaleable solution that the District of
11	Columbia's Office of the Chief Technology Officer,
12	will espouse to you today is so critical.
13	This is not about bells and whistles, it
14	is about saving lives. It is not a preference, it
15	is essential. Again, I would like to thank all of
16	you for your service and support of the public
17	safety community.
18	Now more than ever we are depending on
19	that support in achieving our objectives. I know we
20	can count on you.
21	So, in essence, the Deputy Mayor is
22	saying we need these applications now, but we also

need applications and technologies that have not yet been developed yet. We need scaleability.

You know, we all know so many examples of building not only for yesterday's but today's applications, and realizing that in the next few years there are going to be applications that we need that we have to build the systems and networks to deliver those applications now.

What we are doing now will affect public safety for the next 20 years, and I know I don't have to tell all of you that. We must build not just for today but for tomorrow.

Now, Joe and I are asked all the time by our stakeholders in the District to -- they give us our requirements, and then they also recommend a solution. And often the solution is loaded with bells and whistles, and all kinds of things that aren't really needed to meet, minimally, the requirements that they ask for.

And we are very, very strict about honing and rejecting requirements that go well beyond those bells and whistles. And I really want

NEAL R. GROSS

to make the point that that is not what we are talking about today.

What we are talking about, in our solution, is really what is required to meet these vital, vital needs that we mentioned about.

I wanted to make one more point before I turn it over to Joe. I'm very sympathetic, very sympathetic to the fact that this Committee has been working so hard, so long, on a voluntary basis, and you are getting close to a point where you are wrapping things up.

And I'm also very much aware that the District has not been around, working with you, for all these years. And that we should have been. And I know that Ms. Wallman, you probably see your cousins a lot more than you've seen the District participating in these meetings.

And I deeply regret that. The fact of the matter is that pre-9-11 many of us in the District did not have the vision, at that time, to realize just what kinds of threats realistically we are facing.

NEAL R. GROSS

We did not anticipate a world where everybody would be running to the 7-11, and the Safeway, to get duct tape. We did not anticipate those kinds of needs, as well as we should have.

And, frankly, we just did not have the maturity. We did not have the investment in technology. My agency did not exist. And when it first existed, we did not have a wireless program. And then when we had a wireless program, we did not have the mental band width, and we did not have the money.

And, really, it took the federal emergency funds, after 9-11, that gave us the investment that enabled us to have a serious wireless program. And we went out and sought to find, literally, the finest wireless engineers in the country to help us develop the requirements, the technical requirements that would meet our public safety requirements.

And so we come to you, very humbly, but highly resolute because, although it is very late, it is not too late, and we are really counting on

NEAL R. GROSS

1	you to keep an open mind, and embrace our
2	requirements, and our solutions.
3	And if there are alternative solutions
4	you can suggest, please start with our requirements,
5	and work from there. And that is what I would
6	request.
7	So with that in mind I would like to
8	turn it over to Joe Ross who is the Director of the
9	District's wireless programs, which includes not
10	only the public safety voice Motorola network, but
11	also includes our data and applications. Joe?
12	MR. ROSS: Thanks, Adam. First I would
13	like to thank the NCC for the opportunity to present
14	our needs and solution. I would also like to thank
15	the NCC and its subcommittees for their tireless
16	work, tireless voluntary work.
17	I know that you have spent a lot of
18	time, a lot of you come from other parts of the
19	country. Thanks for coming to our city, our fair
20	city, with lots of snow.
21	We look forward to working with everyone

here towards a solution that meets our requirements.

We are certain that the applications we are 1 2 discussing today are sought by the majority of 3 public safety agencies throughout the country. While Washington, D.C., New York, and 4 Los Angeles, are the primary terrorist targets, we 5 6 do feel that a lot of these applications have a 7 tremendous need throughout the country. Today we cannot utilize these 8 9 applications due to lack of high speed wireless 10 network. As a result lives are at risk. lot of material to cover today, therefore we won't 11 be covering all the content on each slide, and would 12 ask that you save your questions until the end. 13 14 We will be happy to send a copy of the presentation and talk further with anyone about it. 15 Please give your business card to Guy Jouannelle. 16 17 Guy is our project leader for this effort, and will 18 be happy to follow-up. Our objective today is to present 19 several critical mobile data applications that 20 21 require very high speed networks with wide area

coverage, and thus solicit your support to secure an

additional 10 MHz of spectrum in the 700 MHz band, using spectrally efficient, and scaleable spread spectrum technologies.

I'm pleased to be here today with several of my customers from the District. Dr. Fernando Daniels, who will be presenting an application about DMS ambulance video, Lt. Steve Fennell will present a program called Protect.

And, hopefully, if he arrives shortly,

Dave Mulholland, from U.S. Park Police. We have one

project called the Federal Mobile Interoperability

Project, where we are bringing U.S. Park Police,

U.S. Secret Service, and U.S. Capital Police, onto

our ether packet cluster control network, and Dave

Mulholland is one of our customers.

So the outline, again, our objective is to present these applications, and to solicit your support. We will present these four applications, I will present CapWin. We will summarize our requirements, our technical requirements, we will discuss the insufficiencies of the current proposals.

NEAL R. GROSS

1	We will go into the D.C. proposed
2	solution, the required technology, the required
3	spectrum, and then we will discuss next steps.
4	So without further ado I would like to
5	present Lt. Steve Fennell, who is who keeps me
6	honest. He is one of my main customers for our
7	radio network project. We are building a dual band
8	Motorola smart zone network.
9	And Steve makes sure that we are on
10	time, on schedule, and meeting all of his
11	requirements. Thanks, Steve.
12	MR. FENNELL: Good morning. Joe asked
13	me to come down and talk today, try to explain a
14	very important project that the city has been
15	introduced to.
16	It is an extremely unique program that
17	has come about with the cooperation of the
18	Department of Energy, Department of Justice,
19	Department of Transportation, National Institution
20	of Justice.
21	Based on the Sarin gas attacks that took
22	place in Japan several years ago, where scores of

people were injured and killed, these agencies got 1 2 together and tried to come up with an idea that we 3 could start protecting our subways, and give some early notification to the different agencies that 4 would be affected by an attack of this magnitude. 5 Obviously it is on the front burner now 6 7 with what is going on now in the world of terrorism. This was in place long before 9-11. 8 9 At the present time the Argonne National 10 Laboratories is scheduled to start activating some stations here in the city, within the next month. 11 These stations have chemical sensors located at the 12 platform levels, and throughout the immediate area 13 14 of the platform, and of the tunnel area. The application of those sensors allows 15 their OCC personnel, back at their communications 16 17 center, the ability to monitor what is going on in 18 the stations without actually sending people down. They have provided us with laptop 19 computers and a program called PROTECT, or CBMIS, 20 21 which is a chemical biological management

22

information system.

Once they get an activation on their system that has indicated that they have a chemical sensor that has been tripped, they will notify the department and we will respond out to that affected station.

The majority of our units can be at the scene of an emergency in the city within three minutes or so, and setting up to treat whatever situation is going on.

The application of this wireless system is essential in our view because it allows us the ability to have our incident commanders view live video as they are approaching the scene.

Right now the best that they can offer us is the ability to go to a nearby station that has not been affected by the chemical release and plug in a shore line to the laptop computer at that particular station.

For whatever reason that it took place, these shore lines were hooked up within ten or fifteen feet of the vent shafts of the metro stations. So if there is a sizable release of a

NEAL R. GROSS

chemical product you can certainly be assured that that incident commander, if he is close enough to it, will then become affected by it.

So we are limited, right now, to only six plug-in stations throughout the city, taking into account the entire number of stations that are in the city, it limits us greatly.

We have incident commanders responding from all points of the city and they are resigned to have to hook into a station, a particular station, that may be miles away from where they are coming.

It slows down the process, it doesn't allow the rapid intervention of the units to be able to go into the system to asses what is going on, and time is a factor here.

One of the great products of this -- one of the great features of this product is that we have this video feed. Up to 16 different cameras in each station allows the incident commander to tilt the cameras, to pan them in and out, to be able to see exactly what is going on in the station.

It also has what they call plume model

NEAL R. GROSS

projections. If there is a release it factors in 1 2 the wind direction, the amount of trains that are 3 running through the system, and it will show the incident commander which way the plume might be 4 5 headed. If he is plugged into a particular 6 station the plume may be actually coming right 7 towards him. So now he has to unplug his shore 8 9 line, and go to another station that has this 10 capability, instead of if he has the wireless connection, he could just get in and go to the 11 opposite side of which way the wind would be 12 13 blowing. 14 The program also shows what they call rocks train data, which shows the movement of the 15 trains, which is extremely important to us because 16 it affects the flow of the air through the system. 17 18 It also shows weather data and then the actual location of the sensors that have been 19 activated within the particular station. 20

NEAL R. GROSS

commander try to plan an attack, or to help him

So all of these things help the incident

21

mitigate the incident itself. We have seen here, lately, within the last week, how quick it takes to injure or kill people, within these last two night club incidents.

It doesn't take long to wipe out a whole bunch of people. And this is just panic, this is fire, it is a combination of both. This is going to happen on a more grand scale than I think anybody can imagine, in this city, especially in the last few days, that everybody has taken the metro.

You have double the capacity, everybody is trying to get in and out because their vehicles have been snowed in. So the importance of it is ratcheted up even higher.

Last summer we had the opportunity to see an exhibition of a wireless program. And, basically, we were able to watch, within I would say a mile, of the Smithsonian Metro station, everything that was going on underground, while we were driving around in a vehicle.

We went around the Capitol, we went up and down Constitution avenue, Independence avenue,

NEAL R. GROSS

we were able to see, real-time, what is going on, on 1 2 a laptop. 3 And this is exactly what our incident commanders need to be able to do in order to get 4 their personnel properly positioned. 5 So in conclusion, and I won't take too 6 7 much of your time, I ask that you consider this 8 application, and I'm available to answer, or attempt 9 to answer any questions that you may have. 10 CHAIR WALLMAN: Thank you. MR. ROSS: Thanks, Steve. One of the 11 things that Steve didn't mention is that they did 12 look at Y-5 80211 type applications, and the 13 coverage just wasn't good enough. 14 They would have to be within close 15 proximity of the stations, or wherever they might 16 17 need to be, in order to get this high speed. So we 18 need this coverage throughout the city. Wherever the incident commanders, there 19 are 33 metro stations throughout the city, wherever 20 21 the incident commander needs to be, we need to have

this high speed data.

And the Argonne National Labs software experts have indicated that we need a 1.2 megabit per second feed for each individual agent. Now, if you aggregate all the different people that this information needs to go to, you are talking about six battalion chief vehicles, and Steve probably wants an additional six people to get this information, mobilly.

We also need to have police to be able to cordon off the areas. So the band width needs, from a net aggregate perspective, add up quickly.

And we are projecting as much as 17 megabits per second, throughout the district, would be needed in the event of an incident.

Next I would like to introduce Dr.

Fernando Daniels, who is the Chief Medical Officer

for our EMS services here. Dr. Daniels, in addition

to being the sharpest dressed man in the District of

Columbia, is an excellent customer, and we are doing

an application for him that is not going to

completely meet his needs, is going to get part of

the way there, and he will describe it right now.

DR. DANIELS: Good morning members of 1 2 the National Coordination Council. 3 I come before you today to give you some poignant examples of why it is essential to the 4 mission of this department, and pre-hospital 5 providers across the country, to have this 6 7 technology of high speed wireless broad band technology available to us. 8 9 Firstly, in order to make my point, let 10 me go over our current process, as it stands today. When we receive a medical local dispatch our 11 providers immediately proceed to the scene with a 12 minimal amount of information about the patient, or 13 14 the scene. 15 Upon arriving to the scene our providers speedily rush to the aid of the patient, or to 16 17 extinguish a fire, without any knowledge of 18 potential hazards that may be in the building, and without any knowledge of the potential pertinent 19 medical history of the patient. 20 We make the patient assessment, contact 21

med control, if necessary, and transport the patient

to the receiving facility, which is an archaic procedure.

Upon arriving to the receiving facility, the patient is transported for more advanced care.

What I just explained to you is a system that is extremely flawed, outdated, and is practiced by numerous fire, first responding agencies across this country.

This is because of a lack of emphasis and a limited amount of technological advances, and limited resources being placed on improving the overall pre-hospital technological infrastructure.

It is unfortunate that we have telemedicine centers across the country that can
communicate directly with doctors from across the
world to an informational center on the other end,
and we do not have this technology available for our
first responders in the nation's capital.

Now I will discuss with you the potential that we have using the most important wide band technology, and coordinating that with our current technological upgrades that the department

is currently undertaking.

From a futuristic standpoint, and I say futuristic because I just want to kind of digress for a minute. When I started the District of Columbia fire and emergency medical services in August 2nd, of 1999, I had a 286 computer on my desk.

We had no email system, we had no way of communicating across out of the department. And with the help of OCTO we discussed those upgrades, we have a technological infrastructure that is put in place.

And I discussed with them my vision, about a year and a half ago, of having technology so that we could have cameras on the scene, and relay that information back, and I will go over that a little bit later.

Now, from a futuristic standpoint, once we fully integrate our automatic vehicle locators, our mobile data computers, along with portable cameras and apparatus, we will be able to set the standard for the nation.

NEAL R. GROSS

In the future we will receive a call from communications, no longer will the communication operator have to blindly dispatch units. They will be able to send the most appropriate, closest available unit to the scene.

Enroute to the scene the providers will be given valuable information about potential street closures, driving directions, and the incident that they are responding to.

communications will be able to see exactly where all our assets are located. Upon arriving to the scene our providers will be given information about the building size, and potential hazards in the building.

If the scene, or the care of the patient mandates a need for additional advice from the incident command center, or from the medical control facilities, using a portable camera we can transmit concise, high quality, video to receive appropriate additional advice on how to handle the situation, and potentially save someone's life when they are in extremis.

For instance, when we arrive to the scene of a bus accident, or a multiple casualty event, with numerous injuries, we could transmit information back to the medical control facility, and receive appropriate advice and treatment modalities that can save life, limbs, building and prevent major potential catastrophes.

It will allow the department to dispatch appropriate additional assets, and expedite our current process. This technology is paramount as we prepare for the future, as we are able to evaluate scenes, and take care of the citizens and visitors of the District of Columbia.

It is key to us in being prepared for terrorist attacks. We should be able to relay the video to the proper receiving entities, be it the CDC, CIA, FBI, whomever needs to see it, if we arrive on a potential suspicious incident with potential HAZMAT material at the scene.

This way we could mitigate loss of life if we are able to accurately relay that information, and get accurate video on that, there is a good

NEAL R. GROSS

1	chance it could be identified without any further
2	loss of life.
3	As we move forward to be the best pre-
4	hospital agency in the world, we must have this
5	technology and relay real-time, high quality, video
6	to the appropriate agencies that are receiving it.
7	As we prepare for the future, it is
8	important and imperative that we utilize this
9	technology in our day to day activities.
10	And in closing I just want to give you
11	one real poignant example. We had a protest in
12	April or March of last year, at the Capitol
13	building, where it was anticipated we would have
14	10,000 protesters.
15	The weather had been in the mid 80s
16	throughout the prior preceding week. That day it
17	was 97 degrees. We had well over 100,000
18	protesters. It fully stressed our system beyond
19	belief.
20	We had all the local agencies come in.
21	It was I was on the scene, I was over by the
22	stadium. I can tell you it was chaotic. The way we

were able to communicate was via the radio. 1 2 But if we had the potential to show the 3 actual scene we could have gotten advice, we could have done more appropriate things in the field, and 4 we would have been able to dispatch a lot of 5 resources a lot better than we were able to. 6 7 I just want to thank you for listening to me today. And if there is any questions that I 8 9 may answer when we answer those questions, I will be 10 glad to. 11 But I will just tell you, from a prehospital standpoint, it is key that we relay 12 accurate, high quality video back to the receiving 13 14 folks, so that they can make appropriate 15 assessments. MR. ROSS: Thanks, Dr. Daniels. 16 17 know, an important component of the requirements for 18 this system is that, you know, we cover the entire district, and we also provide mutual aid to other, 19 to outlying jurisdictions. 20 21 So we need to have comprehensive wide

area coverage for this application. We have 12

1	hospitals in the District, we have over 100
2	ambulances. The video feeds could add up if we had,
3	perhaps, ten simultaneous video feeds, coming at the
4	same time, we are talking on the order of 2.5
5	megabits per second.
6	That is on the reverse link, that is
7	mobile to base. So we need a system that can handle
8	250 kilobits per second on the reverse link, per
9	device, per ambulance.
10	Dr. Daniels also mentioned being able to
11	be outside the vehicle. So we need PDAs that can do
12	the same thing with a handheld camera. So we are
13	talking 250 kilobits a second, per user and as much
14	as 2.5 megabits per second in the reverse link.
15	Now, the next application I just wanted
16	to discuss a little about all the different police
17	agencies within the District. As Kathleen
18	mentioned, we have some a couple of dozen
19	different police agencies.
20	We have one fire and EMS agency in the
21	District, and that is our D.C. Fire and EMS. And it

is paramount, and that is why Congress gave us 1.4

1	million dollars to put together this federal mobile
2	interoperability project.
3	We are bringing park police, Capitol
4	police, and Secret Service, all onto our ether
5	packet cluster control. I'm going to talk about
6	CapWin in a minute, a couple of minutes later.
7	That takes that project, and takes a
8	monumental leap forward to get not just law
9	enforcement together, but to get all public safety
10	agencies together.
11	So without further ado, Dave Mulholland
12	is the chief information officer, Lt. Dave
13	Mulholland is the chief information officer for the
14	U.S. Park Police. He is one of my customers on that
15	project. And I'm pleased to have him here, and
16	thank him for his comments.
17	LT. MULHOLLAND: Good morning members of
18	the Council, ladies and gentlemen.
19	Let me just take a few minutes and talk
20	about some of the applications that we see from the
21	police side. I'm pleased to tell you, today, that

the institutional walls that so long existed, within

the law enforcement community, are crumbling.

We are learning to communicate, not only with other law enforcement agencies, but also with other public service agencies, public safety agencies, fire, EMS, and also learning to communicate with other essential partners in keeping our roadways, and our community safe, partners like Department of Transportation.

I want to touch on gestations that we see. We want to begin exploring, as we begin to develop our partnership with D.C., U.S. Capitol Police, and U.S. Secret Service, and the Federal Wireless Interoperability Project in expanding out to the CapWin project, and the other law enforcement public safety agencies in the D.C. area.

The first reason why we need a wireless broad band is for heavy file transfer. And we've kind of touched on that, already, this morning.

Incident management tools are essential.

It is just so much information that is coming out now, and it is very hard to educate our officers. We can't expect them to have Jane's

NEAL R. GROSS

Chem/Bio book memorized in their head. We can't expect them to have a Hazmat book memorized in their head.

So we need to provide them with tools, in their cars. We are also looking at some hazmat chem/bio weapons of mass destruction, tools for identification, response, predictability, and modeling.

These are heavy files, this isn't a light transfer of information back and forth. We need to be able to get this information to and from our officers on the street, instantaneously.

Also vehicle telemetry, as OnStar and other types of services, on the private side, continue to develop and send information that is crucial to their public, or their private dispatch centers, and then that is sent to our public safety answering points, we anticipate that ultimately being sent to our offices in our cars, as well as to the fire EMS people.

Whether or not a seat belt was engaged, whether or not there was a rollover, whether or not

NEAL R. GROSS

there was an airbag deployment, how many people were in the vehicle, based on whether there was weight in the seats, whether or not the brakes were deployed, how fast the engine was going, the RPM at the time of crash.

Those are things that are critical for us to know when we are responding, so that we know how to respond. All this comes back to the safety of the public, in general, not just to those people, unfortunately, in that accident or that crash, but to the other people in the roadway.

It makes a difference whether our officers respond lights and siren, and put themselves and other people at danger because we know that people don't always react in a predictable fashion when they see lights and sirens behind them.

And a lot of times some of the secondary crashes that occur are as a result of people trying to get out of the way, or not knowing what to do when they see emergency equipment approaching them.

The second thing I want to touch on is high image, high detail still imagery. The amber

NEAL R. GROSS

alert is rapidly being implement throughout the country, and it is now being implemented in the Washington, D.C. area.

It is critical, if an officer goes to take a missing child report, that they can take a picture, scan it into a computer, and instantaneously send a high detail image of that child to all the other law enforcement public safety agencies around.

You know, it may be the difference of a scar on a cheek, a mole on a forehead, or something, that allows another public safety person to be able to pick that child out of a crowd, or out of a moving vehicle. So the detail in the imagery is very important.

Also lookouts for wanted people, wanted vehicles. It is important for us to be able to get that imagery over, instantaneously. Currently CDPD is really only allowing us to communicate about 14/4, and we know how long that usually takes when you want to download an image.

We need to be able to get that image out

NEAL R. GROSS

instantaneously. It can be a matter of seconds
between an officer sitting on the side of the road
and watching cars go by. It would be a shame for
him, 30 seconds after that file loads to say, wait a
minute, I saw that car 30 seconds ago, or 15 seconds
ago, and now it is gone from sight.

The last thing I want to touch on, real

The last thing I want to touch on, real quick, is video. And I know video is a very sensitive issue when it comes to law enforcement community, because there are a lot of people who have concerns about big brother watching them.

But I want to tell you that in the law enforcement community our thoughts on using video, really, transcend just fixed mobile surveillance points.

Let me talk about some others. First of all unit to unit video. This was tested with the Alert project here in D.C. It has shown to be a doable technology.

It is important, again, back to the public safety standpoint. If there is a chase that begins, a high speed chase, it is important if a

NEAL R. GROSS

supervisor, or a shift commander, watch commander, whoever, can pull up and watch real time from that police officer's cruiser, in order to help make smart decisions.

I can tell you, from having sat in the police car, behind the steering wheel, when you are involved in a pursuit, it is very hard to make a reasonable decision to break it off. It is easier for someone removed, if they can see real time the imagery coming from that police car, and make decisions, yes, this is an area where this pursuit is safe, or no, it is not, for the safety of the public, we are going to break it off.

From the air we have several air-based aviation units within our law enforcement and public safety agencies around here that beam video.

Currently it is done by microwave, that is not cost effective for our units.

Again, this is a tool that is great. If we can send that information during demonstrations, such as we just heard about, back to emergency management centers, emergency operations centers,

that is great.

Cutting back on high speed pursuits. If we have a way that we can beam imagery from an aviation based unit to police cars, they can then shadow those cars that are wanted, either for being stolen, or because they contain a high risk person.

They can shadow them from a distance, unseen by that person. And the result is no chases or less chases, and less accidents as a result of chases.

We heard about the need to beam information back and forth, video back and forth, from police cars to emergency management services, to responding ambulances, and vice versa.

Sometimes the ambulances are the first on the scene, sometimes the police cars are the first on the scene, we want to beam that back and forth.

From Department of Transportation

traffic management centers, a lot of times they

cover the highways. We get a report that there is a

crash, a serious personal injury crash, it would be

nice to be able to call up that camera, right in the police car as you are responding; is this something that we need to respond lights and sirens to, is this something that we need to send more resources to, or is this appears to be everything is okay, and we can slow down our response?

From fixed cameras to mobile surveillance. Yes, there is a time when it is appropriate for law enforcement to use that, whether it be in a critical incident response, or whether it be in a mass demonstration, in order just to determine where things are occurring.

Most importantly is this. The applications that we want to do, because of the diverse geography and topography in the Washington, D.C. area, transcend hot spots.

In fact, many of the critical incidents, crashes and things, occur in the more remote areas.

And that is the areas that you are not going to be able to cover when you use some of the wireless technology that only allows us hot spots.

And then, finally, multiple incidents.

NEAL R. GROSS

We heard how much broad band is needed, how much through-put is needed for each of the two people that presented before me. Just imagine if there is four or five critical incidents that are going on at the city, at the same time.

That is a significant drain on the system, it is imperative that we have this system.

And as the United States Park Police looks forward to continuing partnering with OCTO, we would love to be a partner in this system, and to share these resources.

MR. ROSS: Thanks, Dave. One of the things that I would just like to mention is we see the federal agency as a tremendous -- we need interoperability with the federal agencies. And we see them as needing all of these capabilities, they need a robust, reliable public safety priority access system.

So when we consider the District's needs, we consider the federal agencies needs as well. We are running out of time, so I'm going to quickly go through CapWIN.

NEAL R. GROSS

With CapWIN, it is a browser based interface. CapWIN brings all the different messaging systems together throughout the region.

We also provide cross-jurisdictional data base access. And it is also an incident command system.

The per unit throughput required for CapWIN is not high. But the aggregate total throughput, when you consider the Department of Transportation, all the different law enforcement agencies, all the different fire and EMS units, all of these things add more and more throughput, required throughput to the system.

So we anticipate roughly 25 megabits per second in the event of peak usage from CapWIN. So, in summary, our requirements are we need 1.5 megabits per second on the forward length, base to mobile; 325 kilobits per second reverse link on an individual user.

From an aggregate perspective,
throughout the District, we feel that just from
these applications alone we need 74 megabits per
second on the forward link; we need 28 megabits per

NEAL R. GROSS

second on the reverse link.

And we don't know what the future is going to hold. So we need technology that is scaleable, that can be scaled to require, to address the future needs.

It could be a very high concentration of usage in one particular area. It could be the downtown area, it could be some other area. So as much as 70 percent of the total throughput might be required in 20 percent of the city, and we feel that we need around 10 megabits per site.

We need very high mobility. It needs to be vehicular. You can't wait to transition from one site to another, as would be the case with Y-5, when you are trying to get video from an ambulance.

And we, again, we need entire district coverage with this kind of capability. And, you know, finally we need to meet these requirements as economically as possible, to make the most of taxpayer dollars, and keep more people like Steve, and Dr. Daniels, and Dave Mulholland on the streets.

NEAL R. GROSS

So just, very quickly, 700 MHz, current

public safety band provides excellent coverage, excellent mobility, it does not meet our peak throughput requirements, it does not meet our net throughput requirements, it does not scale in capacity.

And we anticipate extremely high costs,
4.9 GHz is hot spot only, we can't afford to deploy
400 plus sites, we can't afford to operate 400 plus
sites. It doesn't support mobility. Excellent peak
throughput, excellent net throughput, excellent
scaleability.

And costs, we have no idea what it would cost to acquire 400 sites, or if it is even possible. So, you know, the per unit access points is low, but the net cost is high.

So our required technical solution.

We've, and I have mentioned this before, in front of the NCC, we've investigated two particular technologies? 1XEVDO, 1XEVDV, from vendors such as Lucent, Nortel, Siemens, I believe Siemens makes that equipment, and Flas OFDM from Flarion, which is being standardized under IEEE802.20.

NEAL R. GROSS

1	All these technologies require 1.25 MHz
2	channel bandwidth, and probably at least .5 MHz
3	guard band on each edge, it depends what is on the
4	other side to determine how much guard band is
5	needed.
6	All of these technologies, we use all
7	the frequencies at every site. So we have virtually
8	unlimited capacity and simple coordination if we
9	want additional capacity.
10	And the performance that we would expect
11	from these technologies are peak and average
12	throughput of 3 and 1.5 megabits per user.
13	So in regards to meeting our
14	requirements, if we can secure 700 MHz spectrum, it
15	has excellent coverage, it has high mobility, it
16	meets our peak throughput requirement, it meets our
17	net throughput requirement for 10 sites throughout
18	the District, it is scaleable.
19	We anticipate far lower costs. And, in
20	summary, the spread spectrum solutions meet our
21	needs.

NEAL R. GROSS

Just very quickly, to go through the

spectrum, less than 700 MHz, TV is through there, we 1 2 don't feel that we can get one dedicated band that 3 would increase costs of equipment. Lower 700 MHz band, the A and B auctions 4 have not gone on. We would like to pursue halting 5 6 those auctions, and setting that spectrum aside for 7 public safety. Of course, the public safety, 700 MHz, 8 9 the 150 KHz aggregation limit for good reasons, to 10 be able to give the spectrum to as many different 11 agencies that need their own network, and our 12 contiguous spectrum requirement is 2 MHz, and there 13 is no 2 MHz within the wide band. 14 Upper 700 MHz, the D band fits our 15 requirements, it is currently reserved for auction.

Upper 700 MHz, the D band fits our requirements, it is currently reserved for auction.

But, I think, there is an opportunity for us to attack. And, again, 4.9 GHz does not meet our requirements.

So, in summary, we have critical public safety data applications that require wide area coverage, and user throughput up to 1.2 megabits per second, and up to 74 megabits per second net

NEAL R. GROSS

16

17

18

19

20

21

throughput for the District.

The current proposal would provide 3.84 megabits per second for 47 million dollars, with our ten existing sites. Our solution would provide 135 megabits per second, for 10.75 million dollars, with ten existing sites, plus tremendous capacity growth potential.

We think that the 700 MHz lower band blocks of And B, or the 700 MHz upper band block, whatever the 5 MHz chunk is, is required to achieve coverage capacity requirements.

So next steps is we would like to develop partnerships with organizations, you know, such as this one and others interested in very high speed, wide area coverage networks.

We would like to further investigate technical and spectrum options; we would like to speak with one voice to the spectrum decision makers.

We would like to build a sizable market size to elicit more competition, including improved pricing, additional public safety enhancements, if

1	those are necessary, if the commercial technologies
2	do not meet all of our needs.
3	And we would like to work with the FCC
4	legislative and executive branches to secure
5	additional spectrum, improve the time line for
6	public safety spectrum.
7	In summary, we have these critical
8	applications that have been presented today, and we
9	need them now.
10	CHAIR WALLMAN: Thank you very much to
11	all of you for that presentation and solutions. You
12	indicated you had a question?
13	MR. MCEWEN: I just would like to make a
14	couple of comments.
15	I appreciated, Adam, your opening
16	remarks about the fact that you realize you are late
17	at the table. That really is the case, because we
18	have been working at this for 30 to 40 years.
19	And your vision is everybody in this
20	room's vision. The problem is that the vision takes
21	two things. It takes spectrum, and it takes money.
22	And, you know, we have worked very hard,

collectively.

What you are doing here is you've got a room full of advocates for what you want to do, if we had the spectrum to do all the things you want to do, we would be doing them today.

So the NCC's job is not to be an advocate of, necessarily, more spectrum. Our job was to try to help the FCC come up with how we were going to manage the spectrum that they did allocate to us.

The various public safety organizations, the four law enforcement organizations that I represent, the ICP, the major city chiefs, national sheriffs, and major county sheriffs, along with APCO, and the International Association of Fire Chiefs, and others, have been working, collectively together for years.

I mean, the PSWAC report that was released in 1996 advocated more spectrum than the 24 MHz that we got. And that hasn't changed. So you are preaching to a group of people here who have been advocating what you are saying today, has been

1	needed for years and years, and will be needed in
2	the future.
3	If you can convince the powers that be,
4	I mean, what you have here in this room is a
5	collective group of users, and manufacturers, who
6	have been advocating this for years.
7	We have the Congressional political
8	people from all over the country that, you know,
9	that we have been dealing with, and the FCC. It is
10	just kind of a situation where everything you've
11	said today, I don't know anybody in this room would
12	disagree with.
13	The problem is that to get more spectrum
14	to do what you want, every police chief, every fire
15	chief, every EMS director that I know of, would like
16	to do what you are saying you need to do.
17	But I don't know how, you know, I'm not
18	quite sure how we accomplish that any better than we
19	have already tried.
20	MR. ROSS: I guess one thing we, you
21	know, in my summary I wanted to say that we want to
22	create partnerships with I mean, if we speak all

1	together as one voice, and I appreciate everything
2	that you've done to get the 24 MHz that we have now.
3	But if we speak all together, with one
4	voice, I think that it will be more powerful.
5	MR. MCEWEN: Well, we have been, Joe. I
6	mean, the point is that when you say speak as one
7	voice, your chief, your police chief, Chuck Ramsey,
8	and your fire chief, and other people, have
9	supported what we have done, collectively, for
10	years.
11	I mean, so it is not that we aren't
12	speaking with one voice.
13	MR. ROSS: I'm saying asking for more
14	spectrum now. And the other part of it is the
15	technology. You know, if we were to deploy, in
16	order to meet all of our requirements, we would need
17	20 MHz of additional frequency with the current SAM
18	technology.
19	So, you know, we don't see that as being
20	feasible. We think that if we have 5 MHz of
21	additional spectrum, with the spread spectrum
22	technologies that will scale, that will meet our

1 needs.

And we would like everyone's support in asking for the additional spectrum now, you know, to get these auctions off the table. And also to keep an open mind about what technologies we want to deploy in this new spectrum, so that it meets all of our requirements.

CHAIR WALLMAN: Bob Gurss?

MR. GURSS: Bob Gurss, I represent APCO and a lot of individual agencies. I just want to follow-up, briefly, on Harlan's comments.

I will leave to others to address the technical pieces and why or why not the additional spectrum may or may not make sense. I'm not the one to address that.

But I think Harlan is correct that this is really part of an issue that is beyond the NCC's role. And I would suggest that you work with those of us who have been working on the legislative efforts.

Because what you want neither the people here, or the people in this building can really

address. It is the people down the street, at the Capitol, who are going to have to address it, because by law that spectrum is to be auctioned.

And, moreover, even if it weren't to be

And, moreover, even if it weren't to be auctioned it is blocked by TV stations. So there is a lot of impediments, and several people have been trying to work on this issue, nationally, the cities, counties, and so forth.

And I think that is, if it is more spectrum from that band, it is really going to require a legislative effort, in conjunction with people who are already trying to clear those TV stations.

CHAIR WALLMAN: So I think the NCC is not the right forum. But I think this presentation has allowed you to identify your concerns with specificity, and to -- not the right organization, but a lot of the right people are in the room, and overlap with other groups, and other efforts that are trying to do exactly what you are trying to do.

So I think your call for partnerships can be heeded, be answered right now.

NEAL R. GROSS

1	MR. O'HARA: Sean O'Hara, Syracuse
2	Research Corporation. I'm probably just going to
3	reiterate a lot of what was just said, particularly
4	by Harlan.
5	Again, we all agree with those
6	requirements. No one is going to have any arguments
7	with any of those requirements, at all.
8	And maybe now is the time to push
9	forward, you know, to try to meet some of those
10	requirements. I mean, for those in the military,
11	everyone is aware of the concept of a force
12	multiplier.
13	And it is a lot of the technologies that
14	are available to our armed forces, and a lot of the
15	band width that is available to our armed forces,
16	make one soldier equivalent to five soldiers.
17	That same kind of concept, those same
18	kinds of technologies could allow for our first
19	responders force multiplier to be a number like
20	five. And I think that we need that.
21	However, there is nothing in those

requirements that are unique to the DC area,

certainly. And I think that you need to realize that everybody has the same requirements, and you can't fight the battle alone.

In this room, and in organizations like NPSTC, and the Chiefs of Police, and APCO, and the PSWN program, you will find a whole collection of people that can help you with these efforts.

And this group of people contains people that are expert engineers, expert technologists, people that are savvy in public safety requirements, people that have been in public safety all their lives, and people that are very savvy with the regulatory and political processes.

And I think you need to get involved with those groups. I haven't seen you involved with those groups, but you need to get involved with those groups if you really want to push through with this kind of thing.

And I think that through the involvement, and in talking to the pool of expert knowledge, you will find that you can probably broaden your vision of how you want to proceed.

NEAL R. GROSS

I think you are getting maybe a little too focused on solutions here, and you have to realize that there may be some technical tradeoffs, or some technical possibilities that are there, that you haven't looked at.

One of the things that strikes me, once you've been around this for some time, it is not all about money, and spectrum is worth quite a bit of money.

And there is a tradeoff between how much extra your system is going to cost, and how much extra bandwidth it is going to take. And spectrum comes at a price.

And a lot of regulators are not necessarily going to base their decision on giving you more spectrum on the fact that it is going to cost you more money if you don't have more spectrum, because spectrum is money, it is a finite pool of resource, and it can only go to certain places.

And I think you have to kind of temper a lot of your thinking along those lines. That is all I have to say.

NEAL R. GROSS

1	MR. ROSS: Thanks a lot. I just would
2	like to say that that is why we are proposing these
3	technologies that are, you know, the pinnacle of
4	spectral efficiency.
5	CHAIR WALLMAN: Thank you, Joe.
6	MR. POWELL: John Powell. Just a couple
7	of comments on the presentation, actually a follow-
8	up to what Sean said.
9	We are looking at a lot of technologies,
10	and we are looking at technologies that fit within
11	current band plans, and spectrum that we anticipate
12	seeing, as being a for-sure reality in the not too
13	distant future, of course depending upon the TV
14	stations.
15	But there are other technologies out
16	there, and we always need to be concerned with
17	building systems that are interference tolerant of
18	our neighbors. And some of the technologies that
19	you have talked about are not.
20	For example, we know that interference,
21	we are seeing it today, in the 800 MHz band, is

coming from CMR's type applications. And wide band,

the TIA tells us, is -- has the potential for virtually destroying our ability to use those channels.

So we have to be very careful of the tolerance of technologies we are proposing, to all of the other agencies that you are going to have to work with on a day to day basis across the country, because it is going to propagate.

Finally, you can't be a niche here,
because you won't be able to afford the product.

You have to partner with all of us to promote
technologies that, preferably, are going to be off
the shelf.

I mean, that is one of the reasons that we are looking at 802 type stuff for the 4.9 band, it is off the shelf, it is going to be really cheap.

And we can afford to put in 400 hot spots, because it only costs us 100 dollars each, plus the network connections.

And I see people shaking their heads, but that is what it is going to be, and there are other things coming out. For example, take a look

NEAL R. GROSS

1	at 11(J) coming out of Japan, with a network
2	overlay.
3	We just had a presentation on that two
4	days ago. We have to really look at it to see
5	whether it is going to be useful, but it is an
6	application that fits within what we propose for the
7	700 band that we are told offers some opportunities
8	that we have to examine.
9	But be very careful, don't get yourself
10	locked into something that could end up being very
11	expensive, if you could ever get it implemented in
12	the first place.
13	CHAIR WALLMAN: Okay. Any last
14	thoughts?
15	(No response.)
16	CHAIR WALLMAN: All right. Why don't we
17	move to the subcommittee presentations. Glenn, are
18	you ready to go?
19	Thank you very much for all the
20	information, and for the effort you put into the
21	presentation. Thanks very much.
22	MR. NASH: Thank you. We had a

1 technology subcommittee meeting, again, yesterday as 2 is normal for these meetings. Things are winding 3 up, as you are well aware. We are coming to a closure here on the 4 work of the subcommittee. We had a couple of 5 discussions, yesterday. One is, you've already got 6 7 the report from TIA as to the status on the wide band data standard, that is moving forward, being 8 9 completed by the June-July time frame is a target. 10 John updated this morning that that might be a bit of a push, and we will see where that 11 12 goes. One of the things that we did discuss in 13 14 the subcommittee, yesterday, was the question should 15 we come forward to the Steering Committee with the documents that are currently ready, with a 16 17 recommendation to adopt them, and deal with the 18 other documents later, or should we come forth with the complete suite? 19 Which, really, the complete suite of 20 21 nine documents is necessary to have 22 interoperability. The consensus with the committee

was that we should come forth with a single complete suite of documents.

And, in particular, since the FCC is unlikely to deal with it piecemeal, anyway, that we are much better off with a full set of documents.

So while six of the documents are ready, we held off on taking action until we had the full package.

The other main issue that we dealt with was a question had come up with regard to loading standards on the wide band channels. At our last meeting we had asked Sean O'Hara to give us some assistance with that, and he made a presentation to us, yesterday, where he did some analysis of the loading, reaching back to the PSWAC report, as to the types of activities, and what the data loading would be per user, and how many, therefore, how many users could be supported on the system.

What became very evident from that, and he has prepared a spreadsheet that would be very useful to the RPCs in helping them make some of these loading decisions, and we have asked him to, and put together a small taskforce to develop, if

NEAL R. GROSS

you will, an instruction sheet on how to use the 1 2 spreadsheet. 3 But one of the key things, you know, that I saw in that was the types of services that 4 are provided, having very big impact on the number 5 6 of users. 7 And, in particular, as you started to have video type applications, the data load 8 9 increased very rapidly to the extent that just having video on could make the difference between 10 being able to have over 100 users per channel, or 25 11 users per channel, just by taking video in and out 12 13 of the equation. 14 So it is a rather significant impact. 15 And, again, as I have put forth several times, is that from the PSWAC report, where we identified all 16 17 these things that included video, we also said that 18 that was going to take 97 and a half MHz of 19 spectrum. We have, here, 24 MHz of spectrum, and 20 21 we shouldn't think that we are going to jam 97.5

into 24. So there is some applications that the 700

1	may not be the optimal spectrum to put into that,
2	with these limitations.
3	Certainly in the urban areas it may be
4	that we need to restrict, or suggest that the RPCs
5	restrict what types of services users use the data
6	for, whereas in the more rural areas, where there
7	isn't the spectrum impact, we could be more liberal.
8	So, again, it comes down to being
9	something that the RPCs really should consider as
10	they are allocating channels. And the tool that
11	Sean has developed, I think, will help them make
12	that decision.
13	So certainly at the next meeting we
14	would hope to come forth with that tool, with an
15	instruction sheet, that could be then forwarded to
16	the RPCs recommending, you know, here is a tool that
17	you could use to make some of the decisions about
18	allocating the wide band channels.
19	So I think that covers what we went over
20	yesterday, at least the high points.
21	CHAIR WALLMAN: Comments, or questions
22	for Mr. Nash?

1	(No response.)
2	CHAIR WALLMAN: Why don't we hear, next,
3	from the Implementation Subcommittee?
4	MS. RINEHART: I am here today to report
5	for Ted Dempsey who is chair of the Implementation
6	Subcommittee.
7	Since our last meeting Region 5 had its
8	regional plan dismissed. And at our meeting
9	yesterday we discussed the FCC's dismissal of that
10	plan.
11	And what the Implementation Subcommittee
12	has done is taken its documents that it had
13	previously prepared, and we made modifications to
14	those documents to take into consideration the input
15	we received back from the FCC.
16	One of the things that the FCC had
17	suggested, or asked to be included in the plans, is
18	an inter-regional dispute resolution process. In
19	the FCC's suggested draft language, they included
20	the four frequency coordinators as dispute
21	resolution panel.

NEAL R. GROSS

The Implementation Subcommittee had some

concerns with that. They felt that -- some concerns about impartiality. So they felt that it was more proper to keep the dispute resolution process as part of the regional planning process.

And what we did was develop a -- taking what the FCC had given us, we developed a dispute resolution process that included a previous recommendation of the Implementation Subcommittee, which was a national plan oversight committee.

And what this committee would do is review the disputes. So that document is part of the documents that I have distributed here.

The other thing that we discussed, in the meeting, was asking the FCC to reconsider its decision to mandate the CAPRAD data base. And we have suggested that there be a live demonstration to key FCC personnel, to further that effort, now that the data base is up and running, and being used.

And we have a letter attached to that asking the Steering Committee to forward the documents on to the FCC and asking that they adopt them.

NEAL R. GROSS

1	MR. MCEWEN: I think I would urge the
2	Steering Committee to move these recommendations on
3	to the Commission for consideration. I think they
4	are all worthy of, trying to improve the process is
5	what we are trying to do here, and to be responsive
6	to some of the questions that the Commission staff
7	posed to us in this process.
8	CHAIR WALLMAN: I'm predisposed to do
9	that, but just in view of the fact that we just got
10	these documents, I want to give the Steering
11	Committee members a little time to look at them.
12	So perhaps we could, either by
13	conference call, or on the list server, take that
14	action in a few days.
15	MR. MCEWEN: I would agree with that.
16	CHAIR WALLMAN: Okay. So we will take
17	them under advisement, and we will act on them
18	within the next few days. Thank you very much.
19	MR. PROCTOR: Is this just to solve
20	inter-regional disputes, or regional disputes
21	between regions? Inter, within the region itself?
22	CHAIR WALLMAN: Inter, not intra.

MR. PROCTOR: Okay, thank you. 1 2 MR. DEVINE: Steve Devine. Actually the 3 Commission's response to Dave Buchanan's plan 4 actually expressed a desire to see an interregional, region to region, dispute resolution 5 6 process, which is one of the issues we discussed 7 yesterday in the implementation. There is an existing intra dispute 8 9 resolution process already in the Implementation 10 Subcommittee documents. The Commission was looking for some inter-region language as well. 11 12 MR. PROCTOR: Thank you. MR. POWELL: Good morning. 13 Primary 14 activities of the Interoperability Subcommittee 15 yesterday were to review recommendations that we made to the Steering Committee at the last meeting, 16 17 and provide some clarification on a couple of issues 18 that the Chairman, the Steering Committee Chairman's letter to the Commission indicated we would provide 19 them further information on. 20 21 And I will summarize, from a letter that

we will be getting to the Steering Committee, which

I did finish. But first of all I will just run through a couple of items off of our agenda from yesterday, outside of that issue.

Each of you has, in front of you, a collection of documents that were the results of nearly two years of effort by the National Taskforce on Interoperability, which is -- these documents were prepared to educate state and local appointed and elected officials, on issues surrounding interoperability.

And they are very basic documents. I
think they will be educational not only for
appointed and elected officials, but also for
everyone from the general citizen, all the way up to
members of the Commission, and our elected federal
representatives.

And we have provided copies to you, and
I know several of the members on the Steering
Committee helped put these documents together.
Additionally we have provided Chairman Wallman with enough copies of each of the three documents to forward them on to the Commissioners.

NEAL R. GROSS

If any of you want copies they are available through the NIJ regional center at Denver, and I can give you that information, off-line, afterwards. The same goes for the audience.

Again, they are primarily directed, and the priority for distribution of those documents is to state and local elected officials, appointed and elected officials.

And the first publication, we are trying

And the first publication, we are trying to make sure that most of them go that way, realizing that there is also a good use elsewhere.

Let me go to the -- and I'm going to read off of this letter. It is a three page letter, so I won't read it to you, but I will summarize from it. And I want to thank Michael for, last night after the subcommittee meeting, highlighting to his best recollection a number of the questions that they had coming from the last meeting. And I will summarize our answers to those points, Michael.

First of all, and I will read a couple of paragraphs here, at the last meeting you adopted recommendations on issues surrounding standardized

NEAL R. GROSS

channel nomenclature, and expansion of the SIECs to include all public safety bands.

Current FCC designated interoperability and intersystem channels suffer from a lack of cohesive and coordination that inhibits the implementation of, and fails to promote, consistent public safety interoperabilities within communities across the country.

The FCC, early on, required state level plans, such as those for 155.475, the national law enforcement channel, to coordinate these channels. However, over the years, the state plans have not been maintained by the states, nor by the Commission, where most of them were filed in the past.

Furthermore, during the transition to

ULS, records of many license conditions and

restrictions on these state coordinated channels

were lost. A recent example of this problem

surfacing is a license issued in 2002 to the state

of Nevada, were in the frequency of 154.265, which

is a frequency designated, by footnote 19, as a fire

intersystem channel, was assigned for day to day use by the Nevada Highway Patrol in a VHF trunked radio system.

The same NHP system received a license on 156.075, which is used extensively, throughout the state of California, by over 32,000 units, as the state's only interdiscipline VHF interoperability channel, resulting in major interference to California agencies along the busy interstate 15 corridor.

Both of these assignments were cleared by the public safety coordinator and by the FCC's licensing division. It is the unanimous opinion of the Interoperability Subcommittee that these resolutions will address two of the greatest impediments to effective public safety interoperability.

Furthermore, these issues are consistent with the pending Fleetwood petition that is now before the Commission, which states that there must be minimal standardization of interoperability for public safety communications to be effective

nationwide.

In the fourth report, in order, the Commission recognized that the states were the appropriate place to coordinate, and I will use the word as they did, administer the interoperability channels.

Unfortunately, as several states have implemented their SIECs, they are controlling the interoperability channels. So it is our belief that the rules need to be modified to make it clear that the role of the SIECs is one of coordination and management of the SIEC, rather than control of the interoperability channels.

To that end we are recommending that the name SIEC be changed from State Interoperability

Executive Committee, to State Wide Interoperability

Executive Committee.

And that the rules be modified to make it clear that the role is one of coordination and management, and that the SIEC must be inclusive of representatives from all public safety disciplines, at all levels of government, should they decide they

want to participate within that state.

Regarding the standardized channel names we revised and simplified the naming convention, and the document presented to you at the last meeting.

And let me, yesterday at the meeting we asked the manufacturers, the three major manufacturers of equipment in this country, for public safety, E.F.

Johnson, Motorola, and M/A COM, if they saw any impediment to implementing the standard naming conventions.

They all indicated it was their belief that it was a supervisor programming issue that could be dealt with quite easily, and did not require any hardware change to the radios themselves.

Let me go, now, quickly to the questions that Michael provided us, and I will summarize the answers, quickly, on those.

The first question was, must the channel table be codified, or could it be informally recommended as a best practice, by the Commission, or other organizations?

Our feeling is that certain basic operational procedures must be codified to ensure national interoperability. And this is one of those.

Past experience dictates that voluntary standards do not work if you are seeking national uniformity. For example, standard channel names recommended for both Canada and the U.S. for the 800 band.

Even though that standard was initially devised and recommended in California, and we have provided the names of five major organizations in California that have not followed those.

That lack of standardization led to major interoperability problems during the Oakland Hills fire in '91, and the Laguna Hills fire in '93. And the Laguna Hills fire, and we've talked about this example before, LA county, and Orange County, or LA City and Orange County units were severely hampered in their ability to fight that fire, because they didn't believe they could talk to each other, although they had the same frequencies

NEAL R. GROSS

programmed in the radios, and they simply named them 1 2 differently. 3 The feeling is that there was much loss 4 of property as a result of that inability to 5 communicate. Second question, if the table is 6 7 codified, how would the FCC enforce its use? feeling of the subcommittee is that this is really, 8 9 rather than enforcement type legislation, it is 10 enabling regulation, not a new mandate. 11 When agencies sit at the table to make decisions on issues such as these, they often arque 12 13 as to whose system is better, with politics, 14 obstinacy, and pride of ownership all coming into 15 play. If there is a higher authority that has 16 17 already mandated the solution there is, almost 18 always, no question as to compliance. For those who do not voluntarily comply we envision the first step 19 20 in the enforcement process as pressure from 21 neighbors, followed by formal action by the

appropriate SIEC, or RPC.

1	If those interventions fail we would
2	finally look to the FCC as the final step in
3	compliance.
4	And we added a note here that in the 38
5	year history of an SIEC type administrative
6	structure in California, only one formal action has
7	been required by the state, to ensure compliance
8	with its interoperability policies. I think that is
9	a pretty good track record.
10	The third question the FCC already
11	declined to adopt an NCC recommendation that
12	required standardized displays, how is this
13	different?
14	Our response is that this goes to the
15	very crux of the problem, as it is not so much the
16	displays, as it is the channel names themselves that
17	need to be standardized.
18	The next question: If the FCC were to
19	add or delete channels, how would this be reflected
20	in an amended channel table?
21	We don't see this as any different from
22	the frequency itself, or the footnote that would

indicate it as an interoperability or an intersystem channel. The name would just go along with the designation.

The channel designations were a relatively long string. Initially they were.

However, we simplified those with the last go-round.

And it is our belief that the new, smaller, strings which are about six characters long, would compare relatively closely with current names that are used, such as Fire White 1, or Fire White 5, Clemars 22, ISPRN 5, or any of those that are used around the country, and would be very quickly adopted and put into use, without a lot of confusion, or being garbled on transmission on a noisy channel.

The next question, assuming that radios are not required to have displays, as they are not, how is a radio operator, dispatcher, or incident commander, going to remember the proposed channel nomenclature table?

We think much easier than with the current color codes, or other naming conventions, because we have assigned a unique number that is the

NEAL R. GROSS

1	last two digits of these channels, so that a simple
2	table would be a cross reference for a radio, a
3	simple radio for example, that only had a channel
4	number on it, that would simply cross reference the
5	numbers between the two systems.
6	The last question: The FCC is shifting
7	away from a command and control model of spectrum
8	regulation.
9	In the past the agency generally has
10	avoided rules that would impose operational, as
11	opposed to technical constraints. That considered
12	as mandatory use of channel nomenclatures,
13	consistent with the expressed Commission policy.
14	Our response is that our reading of the
15	spectrum task force report is that it has recognized
16	that the command and control model is essential for
17	some user communities.
18	The report specifically recognized
19	public safety as one of those communities. Thus it
20	would appear that the Commission's future vision is
21	specifically acknowledging that regulation of this

type are required for some spectrum allocations.

1	Those are the two issues that we
2	discussed yesterday. We will provide you with the
3	letter that highlights those. And we also will
4	provide the Steering Committee with a follow-on that
5	includes some specific language that we will suggest
6	be forwarded to the Commission to implement these
7	changes.
8	We've actually started on that already,
9	and might make that job a little bit easier, and
10	hopefully take some of the or make it more clear
11	as to what we are asking to happen.
12	MR. WILHELM: I think it would be
13	helpful, John, if you actually drafted proposed
14	rules.
15	MR. POWELL: And we will do that.
16	MR. WILHELM: And that is the easiest
17	thing for people to relate to.
18	MR. POWELL: The one last item is that I
19	will note that at its meeting on Wednesday, the
20	NPSTC directed our support office to go to the
21	Justice Department CIO, and secure the ps.gov domain

name for use on the data channels for

1	interoperability.
2	And they will be proceeding in that
3	effort now that the research is completed. And that
4	is all I have. I would be happy to answer any
5	questions.
6	CHAIR WALLMAN: Just one comment. It may
7	be that we still have a gap of disagreement with the
8	Commission about the nomenclature. We can give it a
9	try. I don't know that we will get a different
10	result, but we can try.
11	MR. MCEWEN: I think that is a critical
12	issue, because without the Commission understanding
13	that the users, I mean, what we have is, again, in
14	this room you have a collective group of users, and
15	manufacturers who have, basically, said this is
16	critical to our interoperability needs.
17	And somehow or another we've got to
18	strongly advocate, again, to the Commission that
19	this is something that is not just a whim, it is an
20	important issue to us.
21	So I would say that we have to do that.

CHAIR WALLMAN: We certainly will put

1	that forward. I think the key is going to be to be
2	more compelling about why it needs to be in the
3	rules as opposed to best practice.
4	MR. POWELL: Would it be, with one
5	representative from four of the public safety
6	agencies here, appropriate to try to obtain letters
7	from the umbrella, chief officer's organizations,
8	supporting this to go with the recommendation?
9	CHAIR WALLMAN: It is hard for me to,
10	you know, from this position tell you what the
11	strategy ought to be. But that could make sense.
12	MR. MCEWEN: If you don't have some kind
13	of a requirement that makes this happen, it
14	basically won't happen. And the problem is, this is
15	going to cost public safety, lives, it is going to
16	cost money, it is going to be a disaster without it.
17	So, I mean, this is a critical issue
18	that the Commission has to understand that I
19	mean, we can document, and document, and document,
20	it is a pretty common sense thing that we are saying
21	here.
22	MR. LOEWENSTEIN: Let me comment on

something that I believe is a historical analogy to 1 2 what we are proposing here. 3 In the early '90s the health care 4 industry found themselves in a situation where they had no standardization, specifically, on the 5 6 submission of claims for payment to insurance 7 companies. Humorously they had what was called the 8 9 NSF, the National Standard Format, which was 10 appropriately and applicably applied as the national similar format, because there was no mandate for it 11 to be this way, and this way only. 12 The health care industry combined, among 13 14 themselves, said to Congress we want a standard, but 15 we can't impose it on ourselves, we do not have the ability to say to ourselves, everybody live by it. 16 17 So they went to Congress. What ended up 18 was the HIPAA Act, Health Insurance Portability and Accountability Act, which then mandated a standard. 19 That standard goes into effect October 16th of this 20 21 And the national similar format goes away.

And there is one standard that everybody

1	lives by. And I think that is analogous to what we
2	are talking about here. You have an industry, if I
3	may call it that, public safety, who says we need
4	help, we want interoperability, we want the ability
5	to save lives, we want the ability to be like the
6	example was in California and say, when I say go to
7	channel 24, everybody knows how to get there, it has
8	the same name that applies to everybody.
9	But we can't impose that strong enough,
10	on ourselves, to make it stick, so we need help.
11	And I think the HIPAA Act is a good historical
12	example of where that kind of request was made, and
13	had a good result.
14	MR. POWELL: I think from a national
15	level, clearly, the Fleetwood Petition highlights
16	that from
17	MR. MURPHY: The Fleetwood agrees with
18	the fact that that standardization has to be imposed
19	because without it you are going to end up the same
20	way you did in your health example, you are going to
21	end up with different nomenclature.

And not so much, okay, you are going to

1	lose some inefficiencies but I think to get to the
2	point that Harlan made, you are actually putting
3	lives and property on the line, like you did in
4	California, without that type of standardization.
5	But getting back to the command and
6	control issues, without the communications and
7	standardizations there is no command and control.
8	If communications is not there, you don't have
9	command and control, it is required.
10	So in order to facilitate, whatever you
11	can do to facilitate the communications, makes that
12	command and control all the more efficient,
13	operating for the public safety community, and thus
14	serving the public.
15	MR. WILHELM: But, Rick, has the federal
16	government adopted standard channel nomenclature?
17	MR. MURPHY: We are in the process of
18	doing that, now, through joint taskforce programs
19	together between the departments, to establish
20	channels that are similar nationwide.
21	But we already have had channels
22	indicated that, tactical channels, that are

indicated nationwide, that will do that.

MR. POWELL: Michael, we have actually been working with them on that channel table that we provided included what they call the redwood channels, with standardized names that follow the same format that we have used. We have included all the federal channels that they've identified in this plan, so it includes all of them.

MR. DEVINE: Steve Devine, State of
Missouri. Years ago we would have said that
interoperability was not being achieved because we
had several hurdles, and spectrum, and some of those
things, are actually coming to an age where those
are available, and we are still finding that
standardization, and the actual, the groundwork, the
people in the field, on the street, and getting them
to talk together.

So this is, actually, one of the last hurdles we are having. So we are almost there, but this is one of the ones that has to be addressed, and it might require some conforming to put the spectrum, and some of the other issues, are falling

1	into place.
2	CHAIR WALLMAN: Thank you very much. We
3	have the matter of setting the next meeting, and let
4	me tell you what we are thinking about doing.
5	We would like to have a meeting that
6	would give TIA the maximum amount of time within our
7	charter, which expires July 25th, to complete, get
8	as far along with their work as possible.
9	So we understand that there is a
10	Fleetwood meeting on Friday, July 18th. So what we
11	are proposing is to have a meeting here in
12	Washington on the 16th for the subcommittees, and
13	the 17th for the NCC.
14	This room is available on the 17th, but
15	only on the 17th, so we would have to use one of the
16	other conference rooms for the subcommittee meeting,
17	again, on the 16th.
18	That seemed to suit the major
19	organization schedules that we were aware of, when
20	we were talking about this. Does anybody see any
21	difficulties with that?

(No response.)

1	CHAIR WALLMAN: All right, then we will
2	proceed on that basis.
3	Any other matters that we should
4	discuss, any other comments people would like to
5	make?
6	(No response.)
7	CHAIR WALLMAN: All right, thank you
8	very much, and we will see you, without the snow, in
9	July.
10	(Whereupon, at 11:40 a.m., the above-
11	entitled meeting was concluded.)
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	